NOTE XIV.

ON MAMMALS FROM MOSSAMEDES.

BY

Dr. F. A. JENTINK.

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Mr. P. J. van der Kellen, a young Dutchman, was one of the Members of an expedition to the Cunene-River under the head of Mr. D. D. Veth, son of Dr. P. J. Veth, formerly Professor in Leyden. This expedition scarcely was in Mossamedes so Mr. Veth fell sick and soon afterwards died and by his death the expedition finished. Mr. v. d. Kellen having arranged the affairs of his late friend Veth resolved not to return home, but, being the naturalist of the named expedition, to explore Mossamedes and the interior of South-Africa and to make zoological collections for the Leyden Museum.

He is collecting in every branch of zoology and what he collected up to this date is in the Leyden Museum, with the exception of a couple of specimens and some duplicates, which are now in the hands of Mr. W. Schlüter at Halle a/S.

A short account of his collections will bear a very great scientific interest as the country where v. d. Kellen is hunting may be called, zoologically spoken, a *terra incognita;* and although among the 26 species of Mammals hereafter enumerated is not a single one new to science, for the greatest part they belong to rather rare species and have a very high scientific value as to the locality.

Two species are from the Congo, where he landed and where he lived during about two months before his going to Mossamedes.

All the *Muridae*, *Euryotis*, *Georychus*, the *Insectivora*, with exception of *Erinaceus* and all the *Chiroptera* are preserved in spirits.

1. *Felis leo* Linné.

Lions are very common. Nearly every night v. d. Kellen heared their roaring. Once, being with a Boer in the field he had a »rencontre" with three specimens: male, female and young.

2. *Proteles lalandei* Geoffroy.

One specimen, an adult female, from Otjipahe, neighborhood of Huilla, 22 February 1886.

Iris light-brown.

3. *Aonyx inunguis* Cuvier.

One specimen, an adult female, from Otjipahe, 19 February 1886.

Iris dark-brown.

4. *Kobus ellipsiprymnus* Ogilby.

One skull, with horns, of an adult male, from the Cunene-river, 15 October 1885.

n. i. *Litzieja*. Called by the Boers »Meerbok."

5. *Eleotragus eleotragus* Lichtenstein.

One skull, with skin and horns, of an adult male, from Otjipompenima, 4 November 1885.

Called by the Boers »Rietbok."

6. *Cephalophus hemprichanus* Ehrenberg.

One skull, with horns, of an adult male, from Otjipompenima, 12 January 1886.

Iris light-brown.

7. *Pediotragus tragulus* Forster.

One skull of an adult female, from Otjipompenima, 9 January 1886.

Iris light-brown.

8. *Aegoceros leucophaeus* Pallas.

One skull with horns and *two* pairs of horns, without locality or date.

I am not sure that they belong to the same species as there are differences in the number and form of the rings. I hope that v. d. Kellen shall be able to procure me skins and more skulls and horns.

Called by the Boers »Bastaard Gemsbok."

9. *Aepyceros melampus* Lichtenstein.

One skull with horns, no lower jaws, of an adult male, from the Cunene-River, 15 October 1885.

Called by the Boers »Rooibok."

10. *Strepsiceros strepsiceros* Pallas.

One skull with horns, no lower jaws, of an adult male, from Otjipompenima, 2 November 1885.

Called by the Boers »Koedoe."

11. *Rhinoceros* sp.

One horn, without date or locality.

12. *Sciurus congicus* Kuhl.

One specimen, an adult female, from Humpata, 13 February 1885.

Iris dark-brown.

13. *Mus pumilio* Sparrmann.

Thirteen specimens, from Humpata, June and July 1885. Iris dark-brown.

14. *Mus nigricauda* O. Thomas.

One specimen, an adult male, from Otjipahe, 11 March 1886.

The type-specimen, a male, described in 1882, has been collected in Great Namaqualand, Hountop-river, by Mr. Andersson in 1862. A stuffed specimen, an adult female, is since the year 1876 in the collections of the Leyden Museum: it has been collected on the same date (1 June 1862) as the type-specimen and is from the same locality (Hountop-river): it therefore apparently has belonged to Mr. Andersson's collection. Another stuffed specimen, an adult female, from West-Africa and presented by Sundevall is also in our Museum. In Mr. Oldfield Thomas' opinion — and I agree with him — it belongs to *Mus nigricauda*. This specimen was labeled *Mus paedulus* nov. sp., but never has been described.

The specimen collected by v. d. Kellen is larger in all dimensions than the type; head and body 6″.7 (type 6″.2), tail 6″.8 (type 5.″8), earconch 0″.9 (type 0″.65).

15. *Mus coucha* Smith.

One specimen, a young male, from Humpata, June or July 1885.

Mr. Oldfield Thomas has seen this specimen and believes that it belongs to this species. He has procured me a transcript of Smith's description, which I reproduce here: »above irregularly clouded, black and tawny, the later the prevailing tint, particularly on head, back of neck and sides; beneath grey white; tail moderate, brown above, white beneath, and thinly covered with rigid hair. Length of body

$5^1/_4$ inches. Inhabits the country between the Orange River and the Tropic."

Andersson (P. Z. S. L. 1882, p. 266) procured one specimen, from Elephant's Vley, 1859. In our collections are two stuffed specimens of this species, viz.: a female from the Cape by von Horstock and a male from Damaraland. The latter probably has been collected by Andersson for it bears the date and locality »24 August 1866, Otjimbingue" and at that time Mr. Andersson was there (P. Z. S. L. 1882, p. 266: *Mus silaceus*, Otjimbingue, August 19 and 27, 1866).

Here are some measurements of v. d. Kellen's specimen:

	m. m.
Length of head and body	86
» » tail.	80
» » hind foot	20
» » earconch.	15.5

Muzzle and feet are pure white, forming a striking contrast with the colour of the other parts, especially if in spirits.

16. *Euryotis irrorata* Brants.

Three specimens, adult females, from Humpata, 29 June and 2 July 1885.

Iris black. There are six well developed mammae.

Brants says nothing concerning sex or locality of the type-specimen, but gives very exactly drawn figures of the animal, its skull and dentition. Lichtenstein's figure of the animal is very bad and incorrect (tail is always shorter in reality): he reports that »das Vaterland dieses Thiers ist die Ostküste des südlichen Africa, wo Herr L. Krebs es in den Waldungen ziemlich häufig antraf und mehrere Exemplare davon für das Berliner Museum präparirte." Smith's figures are very good; he observes »this is the species which the collector, who commences his labours near Cape Town, will first acquire."

Gray (P. Z. S. L. 1862, p. 181) has given the name

Euryotis irrorata as a *new* specific title to a Rat from the Cameroon Mountains (Burton's collection) and added »I am not certain about this species until I can compare the skull with those of the other species of the genus from Africa, as they are all very similar externally." Perhaps Gray's specimen has nothing in common with the true *Euryotis irrorata* Brants.

17. *Georychus hottentotus* Lesson.

It may be called a hopeless labor to make out how many species are to be grouped in the genus *Georychus*, as without exception they have been described insufficiently and mostly figured incorrectly. Only a study of *all* the types and in the first instance a comparative examination of the skulls, especially of the teeth, may here throw some light. Gray (P. Z. S. L. 1864) divided the species into two groups according to their fur and into four groups by the form (and number) of the grinders. According to Gray *Georychus capensis* has $\frac{3-3}{3-3}$ grinders, and he thinks that *Heliophobius* has $\frac{4-4}{4-4}$ grinders, that *Heliophobius argenteocinereus* Peters is his *Georychus pallidus*, and that the $\frac{6-6}{6-6}$ grinders in Peters' species must have been an anomaly in the type-specimen. (NB. Peters had three skeletons!). As far as I can judge *Georychus capensis* in a fullgrown state and with a complete dentition has $\frac{4-4}{4-4}$ grinders as well as the other species of the genus, and, as to the number and shape of the molars, Peters' genus *Heliophobius* is quite distinct from *Georychus*. In our Museum is one of the types — a rather young stuffed specimen — of Peters' species. The skull was in the skin; I removed it the other day and find 4 grinders in each upper jaw, but 5 in each lower jaw. My specimen measures 120 m.m. and Peters' type 185 m.m., and it therefore is clear why in my specimen all the grinders are not yet developed. Peters was quite right, for my young specimen again demonstrates that, although externally there are no generic differences,

there is however constantly a larger number of molars in *Heliophobius* than in *Georychus*.

After this deviation, revenons à nos moutons. There are in v. d. Kellen's collections *four* specimens belonging to the genus *Georychus*. They agree the best with Lesson's description (not with the very bad figure) of *G. hottentotus;* later investigations based upon the study of the types may make out if this species is synonymous with another species. Although the four specimens before me differ very much in size, they have ungrooved incisors and $\frac{4}{4}$ molars without folds; the smallest one has a small white spot on the back of the head, a somewhat larger specimen has a very large white spot on the back of the head, a still larger specimen has the white spot of a size intermediate between the two smaller specimens, meanwhile the largest specimen has no trace of such a white spot on the head. So that I hardly can believe that this white spot is a specific character.

		head and body.	*hind foot.*
N° 1.	Otjipahe, 15 March 1886.	127 m.m.	22 m.m.
N° 2.	Humpata, 27 July 1885.	141 » »	23 » »
N° 3.	Catumbella, 26 June 1885.	165 m.m.	24 m.m.
N° 4.	Otjipompenima, 12 Nov. 1885.	193 » »	25 » »

There is no difference in color, the hairs are mouse-colored, tipped with a rich goldbrown, only in the younger ones the latter tinge is less developed.

18. *Lepus ochropus* Wagner.

One specimen, a nearly fullgrown male, from Humpata, 11 February 1885.

Iris light-brown.

I remember here that I described in the Notes from the Leyden Museum, 1880, p. 57, a quite different species, *Lepus salae*, collected by the late Sala in Mossamedes.

19. *Macroscelides intufi* Smith.

This beautiful species seems to be very rare in collec-

tions although its geographical distribution is a rather wide one. The type, a female, described by Smith was obtained upon the banks of a river near to the Tropic of Capricorn. Peters collected several specimens in Mozambique; he reports that »man sie nicht häufig antrifft." Kirk (Mammals of Zambesia, P. Z. S. L. 1864) believes this to be the species seen on the river Rovuma, in lat. 11° South.

In v. d. Kellen's collections is a single specimen, an adult male, from Suppe, 8 June 1885.

Iris black.

20. *Erinaceus frontalis* Smith. [1])

One specimen, a female, from Humpata, 8 February 1885.

Iris dark brown. Called by the Boers »Krimpystervark."

21. *Crocidura mariquensis* Smith.

Two female-specimens, an adult and a nearly adult one, from Humpata, 27 June 1885 and 2 July 1885.

Iris brown.

The two type-specimens seen and described by Smith were obtained in a wooded ravine near the Tropic of the Capricorn.

The specimens before me agree very well with Smith's description and figure, but without having had the types in hands I cannot be *sure* of my identification. Every one will be convinced that the study of the *Soricidae* is a very difficult one, and in my case the difficulty increases as Smith gives no measurements of the hind feet and says nothing else about the teeth as that the *incisors are white.*

I find a large difference in the length of the hind feet of my specimens compared with Smith's figure. It seems to me that as to the hind feet his figure is misdrawn and indeed in looking at that figure one gets the impression

1) Cf. Dobson, a Monograph of the Insectivora, 1882, Part I, p. 18.

as if that part really has been represented abnormally large, it measures 0″.85, meanwhile the same in v. d. Kellen's adult female-specimen measures 0″.55.

The incisors are white; the total number of teeth is 28.

22. *Rhinolophus aethiops* Peters.

The types, ♂ and ♀, of this species are in the Berlin Museum; in the British Museum were five specimens as Dobson wrote his Catalogue (in 1878). The types are from Damara-land, Otjimbingue; one specimen in the British Museum from Angola (Monteiro's collections) and four others from the same locality.

The *three* specimens in v. d. Kellen's collections agree exactly with Dobson's description (Catalogue p. 122); *one* specimen, an adult male, is from Humpata, 27.6.1885, the *two* others, an adult male and a ditto female, are from Otjipompenima, 6.11.1885.

23. *Rhinolophus capensis* Lichtenstein.

One specimen, an adult male, from Otjipahe, 12 March 1886.

24. *Phyllorhina fuliginosa* Temminck.

One specimen, an adult male, from Otjipompenima, 15 January 1886.

This is the first representative of the species in South Africa.

25. *Nycteris hispida* Schreber.

Two adult males, from Banana, Congo, 16 September and 25 November 1884.

26. *Vesperugo nanus* Peters.

One adult male, from Vista or Vesta, Congo, 19 November 1884.

27. *Scotophilus borbonicus* Geoffroy.

One specimen, an adult female, larger (forearm 2″.3) than the specimen measured by Dobson (forearm 2″), from Otjipompenima, 14 January 1886; *one* female-specimen also larger (forearm 2″.15), from the same locality, 15 January 1886; *one* female of the same size (forearm 2″) as Dobson's specimen, from the same locality, 14 January 1886. The belly of the latter specimen is not pale yellowish white, but more olive-brown like the back; this specimen is in a very bad condition.